

REMARKS

Reconsideration of this application, based on this amendment and these following remarks, is respectfully requested.

Claims 18 remains in this case. Claim 18 is amended.

Claim 18 was rejected under §112, second paragraph, as indefinite for failing to particularly point out and distinctly claim the subject matter of the invention. Specifically, the Examiner found that it was unclear from the claim whether the Fast Fourier Transform and the buffer receive time domain values in parallel; if so, the Examiner found that such a recitation would not be supported by the specification. The claim was also rejected because the phrase "the complex amplitudes multiplied in each case multiplied by a respective complex value representing a respective complex derotation of the complex amplitudes corresponding to a respective time shift of the synchronizing frame" was unclear.

Claim 18 is amended to overcome the rejection. Amended claim 18 now recites that the buffer is for supplying the time domain values to the Fast Fourier Transform, consistent with the specification,¹ and clarifying the Examiner's concern regarding the receipt of the time domain values by these elements. Also in amended claim 18, the frame synchronizer element is clarified regarding the multiplications of the complex amplitudes by a complex value representing a respective complex derotation, for each of the plurality of correlations.² No new matter is presented by this amendment.

Applicants respectfully submit that amended claim 18 is now sufficiently definite as to meet the requirements of §112.

Applicants wish to bring the items of information listed on the PTO/SB/08b submitted with this Amendment to the attention of the Patent and Trademark Office relative to this

¹ Specification of S.N. 10/074,942 at page 4, lines 31 through 37, and Figure 1.

² See specification, *supra*, at page 10, line 36 through page 11, line 4; page 12, lines 9 through 30.

application. Because this information is submitted after receipt of a first Office Action on the merits, but before a final rejection or allowance, payment of the fee due under 37 C.F.R. §1.17(p) is enclosed, in the form of the enclosed Fee Transmittal (PTO/SB/17), which authorizes this fee to be charged to deposit account 20-0668.³

Copies of the items of information are enclosed. All of these items are in the English language, and as such no additional statement of their relevance is required.⁴

By citing these items of information, Applicants do not admit that any of this information is, or is considered to be, material to the patentability of any of the claims of this application.⁵

Further, in the spirit of completely and fully complying with the duty of candor and good faith in this application, and completely and fully serving the public interest by ensuring that the Patent and Trademark Office is fully aware of and can evaluate the teachings of all information material to patentability of the claims in this application, Applicants submit the following documents, which are listed on the enclosed PTO/SB/08b, and which were brought to the attention of the assignee of this application by one or more parties, relative to one or more patents through which this application claims priority:

Cioffi et al.⁶, "Modification to DMT Synchronization Pattern Insertion", Submission T1E1.4/93-089 to the T1E1.4 Working Group of Committee T1, sponsored by the Alliance for Telecommunications Information Solutions and accredited by the American National Standards Institute (April 15, 1993).

Chow⁷, "Recommended Reveal Sequence for DMT ADSL", Submission T1E1.4/93-114 to the T1E1.4 Working Group of Committee T1, sponsored by the Alliance for Telecommunications Information Solutions and accredited by the American National Standards Institute (May 10, 1993).

³ 37 C.F.R. §1.97(c).

⁴ 37 C.F.R. §1.98(a)(3)(i).

⁵ 37 C.F.R. §1.97(h).

⁶ James T. Aslanis, one of the inventors of this patent, is a co-author of this document.

⁷ Jacky T. Chow, one of the inventors of this patent, is the author of this document.

Bingham, "Proposed Standard: Sections 6.6 - 6.10 & 7.6 - 7.10 Encoders, Modulators, Cyclic Prefices, DACs, and Anti-aliasing Filters", Submission T1E1.4/93-120 to the T1E1.4 Working Group of Committee T1, sponsored by the Alliance for Telecommunications Information Solutions and accredited by the American National Standards Institute (May 10, 1993).

These documents each bear a date that is earlier than one year before the priority date of this application. It has been alleged, by those parties, that these documents are all printed publications (presumably as of the indicated dates), and thus prior art against those patents, and therefore this application, under §102(b).

Other documents discovered by the assignee of this application, and that are listed on the enclosed PTO/SB/08b, include:

Cioffi et al., "DMT Specification Overview for ADSL", Submission T1E1.4/93-083 to the T1E1.4 Working Group of Committee T1, sponsored by the Alliance for Telecommunications Information Solutions and accredited by the American National Standards Institute (April 15, 1993).

Cioffi et al.⁸, "Detailed DMT Transmitter Description for ADSL", Submission T1E1.4/93-084 to the T1E1.4 Working Group of Committee T1, sponsored by the Alliance for Telecommunications Information Solutions and accredited by the American National Standards Institute (April 15, 1993).

Chow et al.⁹, "Recommended Reverberation Training Sequence - Revision 1", Submission T1E1.4/93-086-R1¹⁰ to the T1E1.4 Working Group of Committee T1, sponsored by the Alliance for Telecommunications Information Solutions and accredited by the American National Standards Institute (May 10, 1993).

Cioffi et al.¹¹, "Recommended Training Sequence for SNR Computation with DMT ADSL", Submission T1E1.4/93-087 to the T1E1.4 Working Group of Committee T1, sponsored by the Alliance for Telecommunications Information Solutions and accredited by the American National Standards Institute (May 10, 1993).

These documents also each bear a date that is earlier than one year before the priority date of this application.

⁸ Inventors Aslanis and Chow are co-authors of this document.

⁹ Inventor Chow is a co-author of this document.

¹⁰ It is believed that the "R1" designation refers to a first revision of a previous submission having the same number (e.g., T1E1.4/93-086).

¹¹ Inventor Chow is a co-author of this document.

Each of these documents is mentioned in later-prepared minutes of one or more corresponding meetings of the T1E1.4 Working Group of Committee T1, sponsored by the Alliance for Telecommunications Information Solutions and accredited by the American National Standards Institute (the "Working Group")¹². On information and belief, according to the usual practice of the T1E1.4 Working Group, papers¹³ in support of submissions to the Working Group were generally made available to the attendees of Working Group meetings, typically by placing copies of the papers on a table at the meetings. On information and belief, in at least more than one of the Working Group meetings, not all papers in support of submissions were in fact available. On information and belief, according to the usual practice of the T1E1.4 Working Group, oral presentations of submissions to the Working Group were made in the Working Group meetings to which the submissions were submitted. After recent investigation, however, the assignee of this application cannot determine with certainty whether copies of any of these specific documents were provided or made available to the attendees of the Working Group meetings to which these submissions were made, and cannot determine with certainty whether an oral presentation of the subject matter of any of these submissions was made in those meetings.

Certain patents¹⁴ through which this application claims priority are currently involved in litigation in the United States District Court in the District of New Jersey, in a case styled *GlobespanVirata v. Texas Instruments Inc. et al.*, No. 03-2854 (GEB). A copy of the complaint in that case is enclosed. In that litigation, the plaintiff GlobespanVirata has claimed that two of these patents are unenforceable due to inequitable conduct because of the failure of the assignee of those patents (and this application) to disclose the T1E1.4/93-120 document¹⁵ to the Patent and Trademark Office in the prosecution of those patents.

¹² "T1E1.4 Interim Meeting Report: April 15 and 16, 1993", Document T1E1.4/93-103B, pp. 3 and 5; "T1E1.4 Interim Meeting Report: May 10-14, 1993", Document T1E1.4/93-103B, pp. 10 through 12 (copies enclosed).

¹³ Such as the submitted T1E1.4 documents.

¹⁴ U.S. Patent No. 5,627,863; U.S. Patent No. 5,901,180; U.S. Patent No. 6,359,933.

¹⁵ Mentioned above.

In addition, another party has asserted that two of the patents through which this application claims priority are unenforceable due to inequitable conduct because of the failure of the assignee of those patents (and this application) to disclose the T1E1.4/93-089 document¹⁶ to the Patent and Trademark Office in the prosecution of those patents.

Applicants assert that no deceptive intent on the part of the assignees, inventors, agents, or attorneys existed at any time during the prosecution of this application or the patents through which this application claims priority, with respect to disclosure of the T1E1.4/93-120 document, the T1E1.4/93-089 document, or any of the T1E1.4 documents submitted in this disclosure.

Consideration of this information in this application is respectfully requested.

A Petition for Extension of Time for filing this response is also enclosed. As stated on that Petition, and on the enclosed Fee Transmittal (PTO/SB/17), the Patent and Trademark Office is authorized to charge the fee for this Petition, and for the submission of the cited information, as well as any other fees necessary in this case at this time, to deposit account 20-0668 of Texas Instruments Incorporated.

¹⁶ Mentioned above.

For the above reasons, Applicant respectfully submits that the claim remaining in this case is in condition for allowance. Reconsideration of this application is therefore respectfully requested.

Respectfully submitted,



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CERTIFICATE OF MAILING

37 C.F.R. 1.8

The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an enveloped addressed to:

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

on January 2, 2004.



Rodney M. Anderson
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